

by the washing machine interrupt switch is allowed to rise to the point where the interrupt switch returns power to the washing machine.

5. Assume a community with local power generation. This community has 5 fuel cells, each supporting 100 homes for a total community of 500 homes. Assume that the power from any or all of the 5 fuel cells can be shared by, or distributed as needed to any or all of the 500 homes. With all 5 fuel cells running, there is enough power to meet the community's peak power demand. If one or more of the fuel cells is disabled, the 500 homes need to conserve power usage as they are now being powered by the remaining 4 or less fuel cells. With all 5 fuel cells operating and on-line the power capability is given a rating of 5. With one fuel cell disabled, the power capability rating is 4, with two fuel cells disabled the power capability rating is 3, etc. The homes in this community are all equipped with generator monitors on the power lines supplying their homes. If one or more fuel cells become disabled, the associated power capability rating is transmitted to all the generator monitors in the communities. The capability ratings cause the generator monitors to be set with reference outputs that reflect the homes share of the current generating capacity. The generator monitors 20 in the homes can then use the reference outputs to calculate GAP levels and transmit them to the other devices in the home. In this example, a system of the present invention is used to manage electricity usage in a reduced utility power condition as opposed to the reduced power coming from a home's individual generator.